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REMARKS

Claim 1 and 14 have been amended. Claim 1 has been amended to better define the invention and claim 14 has been amended to correct a clerical error. The specification has been amended to agree with the amendment to claim 1. Claims 1 through 15 remain in this application and stand for examination. Reconsideration and reexamination are requested in view of the following amendments.

Rejection of claims 1-15 for indefiniteness

The Examiner rejects claims 1-15 under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirements. Specifically, the Examiner objects to the limitation "...used as media and having a substantially neutral pH" as set forth in claim 1.

The Examiner is advised that there is no specific reference to the claim limitation to which objection has been raised. Rather, it is inherent throughout. Reference is made, for example, to page 6, lines 4-5 where it is set forth that "...a liquid hydrolysate [is added] to canola meal or other grains used in feed material...". Clearly, the liquid hydrolysate is the liquid media (phytase is a liquid as well but this addition is only in minute amounts so it does not contribute to the overall wetness of the slurry). As to the query relating to "neutral pH", this limitation is understood as, from page 7, lines 6-7, where it is explained that the pH is "lowered to between 5.0 - 5.5..." thus implying the pH before being lowered was higher and since the term "substantially neutral pH" contemplates a range, it would imply that the pH of the hydrolysate and canola meal was in a substantially neutral range centered around the neutral value of 7. In any event, this, in fact is true. The pH of the hydrolysate before mixing with the canola meal is between 6.8 and 7.0 which is a neutral pH and mixing both components does not alter this pH number. Such implication "...reasonably conveys to the artisan that the

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inventor had possession at that time of the later claimed subject matter..." as the Examiner correctly notes under the Ralston Purina Case cited.

Rejection of claims 1-15 for obviousness

The Examiner rejects claims 1-15 for obviousness under 35 U.S.C. 103(a) as being unpatentable over WO 98/34498 (Saxby et al), the Stone et al document, EP 0321004 and Nielsen et al United States Patent 5,989,600.

WO98/344984 (Saxby et al) does not teach the use of a phytase enzyme. It teaches the use of wheat bran which is similar to that teaching in the Stone et al document. Neither document teaches or suggests the use of a phytase enzyme instead of wheat bran.

Stone et al further teach using a low pH for their silage. This low pH is necessary to stabilise the slurry because bacteria will form at higher pH levels over time, especially the lengthy times disclosed by Stone et al. Thus, Stone et al required pH stabilization in order to prevent bacteria formation because his process took an inordinately long time. At a pH of 5.0, formic acid will not protect against bacterial spoilage. The pH must be significantly lower, at about 3.9 or lower. This is in contradistinction to the present invention which does not need acid stabilisation and allows the phytase to work at its optimum levels because we codry the mixture after the phytase treatment is finished. The Examiner will appreciate that the difference between a pH of 5.5 and 3.8 is very large and to avoid bacteria formation, it is necessary to maintain tight controls on the acid levels which Stone et al were required to do thereby resulting in his lengthy process which was not therefore commercially viable.

EP 0321004 suggests nothing about using a fish hydrolysate as a liquid platform to allow the dephosphorilation of phytic acid in plant meals in the presence of phytase which

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is, of course, the objective of the present invention.

Neilsen et al teach nothing about the dephosphorilation of phytic acid in plant meals in the presence of phytase which is an objective of the present invention.

There is, therefore, simply no combination of elements taken from suggestions made in the various references cited by the Examiner which reach the present invention.

Applicant must comment, with respect, that the Examiner has applied a classic test of incorrectly combining elements taken from various references in an attempt to obtain the present invention. However, the law is very, very clear that, absent a suggestion to combine the various elements, the invention may not be found to be obvious and, again, the citation of In re Mills, 916 F.2d 680, 16 USPQ2d 1430 (Fed.Cir. 1990) is appropriate:

The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. (emphasis added)

In the present case, the Examiner has taken various limitations enumerated within the claims and has selected four(4) references which contain various of those limitations. The Examiner has not pointed to any suggestion or description within any of the references that suggest the combination of elements of the present invention. Furthermore, the Examiner has not suggested that the combination of such limitations would be functional. If the Examiner can point to any such suggestion in any of the references cited, applicant invites the Examiner to do so.

Rejection of claim 15 for anticipation and/or obviousness

The Examiner rejects claim 15 as being anticipated by or, in the alternative, obvious in view of aforementioned WO

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98/34498 (Saxby et al), aforementioned Stone et al, EP 0286056, Vanderbeke et al United States Patent 5,554,399, aforementioned Nielsen et al, WO 00/10404 or aforementioned EP 0321004.

The product of the aforementioned Saxby et al reference is a product which includes natural source endogenous enzymes, namely the phytase in wheat bran which dictates an uncontrolled process. It does not include exogenous enzymes as does the product according to the present invention which is made in a controlled process.

The product of Stone et al teaches a product very similar to that of aforementioned Saxby et al. The product does not include exogenous enzymes as does the product according to the present invention which is made according to a controlled process.

The product according to EP 0286056 is a raw feedstuff which is grain meal with an added enzyme preparation. The product does not include a fish hydrolysate and such a hydrolysate is not suggested by the disclosure of the EP '056 document.

The product according to WO 00/10404 is a phytate converted into an inorganic phosphate. There is no fish hydrolysate in the product and no suggestion that such a hydrolysate could be used to form the product or included in it.

The product according to EP 0321004 is a product obtained by steeping corn or sorghum kernels in warm water containing sulfur dioxide and in the presence of an enzyme preparation used to degrade the hytin present in the corn or sorghum. There is no fish hydrolysate used or present in the product and no suggestion that a fish hydrolysate could be used within the product.

The product according to Vanderbeke et al United States Patent 5,554,399 is a product which is an enzyme composition

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having a synergistic phytate hydrolyzing activity. Fungal enzymes are preferred. There is no fish hydrolysate used or present in the product and no suggestion that a fish hydrolysate could be used or be present within the product.

The product according to Neilson et al is a product which utilises a vegetable protein source with one or more phytase enzymes. There is no teaching of fish hydrolysate and no suggestion that a fish hydrolysate could be used to form the product or be present within the product.

Applicant therefore submits that the burden present on the applicant under In re Brown is clearly met which makes the product by process as recited in claim 15 patentable over the art cited.

Finally, the Examiner is advised that the corresponding European application has been favorable examined over the references cited in the International Search Report and copies of the International Preliminary Examination Report and the ISR are attached for the convenience of the Examiner.

In view of the above, the claims should now be allowable. Withdrawal of the objections and rejections is requested and allowance of claims 1-15 is solicited.

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Respectfully submitted,

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